COVER SHEET

THE USE OF FORMAL PROJECT MANAGEMENT PROCESSES IN THE PROCUREMENT OF QUEENSLAND AGED CARE FACILITIES

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ABSTRACT

The Queensland Aged Care (AC) industry is currently suffering a significant capital shortfall while the level of construction activity required to meet the demand for aged care is increasing. In many cases, large construction cost overruns occur and, as a result, owners have been investigating approaches such as Project Management (PM) as a more effective means of managing the process. In addition to the management of costs, it is obvious that PM also has the potential to contribute to the organisation and management of other vital aspects of the procurement of AC facilities. Of particular relevance are communications and risk management – both of which are said to be key critical factor in successful projects.

The research reported in this paper aimed to examine this potential and the extent to which it has been realised to date. This was done by an interview survey of eleven managers, comprising eight from the AC sector, with two from the hospital sector and one from the retail sector for comparison. The AC interviewees represent sixty two per cent of residential AC operations in Queensland.

The results suggest that although the AC sector is currently considered to manage its procurement costs adequately, there may be higher cost variations during construction than

the health and retail sectors. Insofar as risks and communication are concerned, although there is desire for their proactive management through PM, little is being done to ensure this occurs in practice. Only one of the AC sector reported the use of separate PM specialists. The reasons suggested for this concern the size of AC projects, ignorance/lack of knowledge of PM, less onerous corporate governance requirements for the sector and a general reluctance to depart from its traditional processes.

Keywords

Project management, aged care facilities, procurement, Queensland, cost management, risk management, communications management

INTRODUCTION

In 1985, 10% of Australians were aged 65 years or older – a figure expected to rise to 20% by 2030. For people aged 80 or older, the proportion is expected to rise from 2% to 7% by 2050. These increases will produce radical changes in the population structure and needs of Australia, particularly in Queensland, where population growth is particularly high (McCallum and Kobayashi 2000). One effect of this is an increasing need for Aged Care (AC) for older people unable to function and care for themselves independently.

Currently, AC providers charge accommodation payments (known as bonds) and receive government subsidies. A resident defined as the highest care classification (RCS1), for

example, generates a funding subsidy of $120.20 per day (Bridges, 2004). Subsidies are only available, however, if the service providers have *certification*, and this can only be obtained providing the facilities involved meet certain standards (Commonwealth Department of Health and Ageing 1997).

At the same time, the AC industry is suffering a significant capital shortfall. One effect of this is that AC providers increasingly require larger sites in order to remain financially viable (Hook, 1999). Another is on building obsolescence (Quinn, 2003). In many cases, buildings are old and require serious upgrading, or replacement, if they are to achieve certification in the next round in 2008 (Rees-Thomas, 1999).

A surge in building activity is underway, therefore (Pitt 1999), but in an environment where funding is scarce it is of concern that, in many cases, cost overruns are prevalent (Giegerich 2002). As a result, owners have been investigating more sophisticated procurement methods, such as Project Management (PM), as a better means of managing the process (Brown 2002).

Project management has been defined as the planning, monitoring and control of all aspects of a project and the motivation of all involved to achieve the project objective safely and within agreed time, cost and performance criteria (Atkinson, 1999). The importance of Project Management is supported by Chan *et al* (2004) who state that Project Management action is a key for project success. Project Management Institute (1996) outlines nine key knowledge areas that make up the discipline of Project Management. Three of these are project risk, communications and cost management.

In addition to the management of costs, therefore, it is obvious that PM also has the potential to contribute to the organisation and management of other vital aspects of the procurement of AC facilities. Of particular relevance are communications and risk management – both of which are known to be key critical factors (e.g., Boedecker 1997; Back and Moreau 2001; Baccarini 2002; Brown 2002; Globerson and Zwikael 2002; Jovanic 2002; Nichols 2002; Wellington and Norris 2002).

The common risks in the development of capital facilities in the aged care sector are essentially the same as any other sector. That is, risks associated with:

- project scope;
- failing to achieve the required quality and tie constraints;
- failuring to complete the project within defined budget allowances (Widemann 1992)

Of course, all these risks are interrelated with each other. For example, if the project scope is not specifically managed throughout the brief definition and design phase, then either the quality of the completed project will be compromised or the cost of construction will not be within budget. Similarly, if the project budget is not managed with rigour and focus during the design phase then the final quality and scope may be either inappropriately high or unacceptably low. In project management, therefore, each and every core function is inextricably linked, and all need to be kept in balance to achieve true project success.

The severity of these key risks to aged care organizations is high and the impact of both successful and unsuccessful project implementation to the organization is substantial, with the consequences of failure being magnified by key characteristics of the industry. Of particular relevance is that:

- A surge in building activity is anticipated to enable aged care providers to posses building stock of a sufficient quality to be able to operate residential aged care facilities (Commonwealth Department of Health and Ageing, 1997; Pitt, 1999).
- The industry is suffering a significant capital shortfall impacting building obsolescence (Quinn, 2003).
- Aged Care providers require the development of larger and larger facilities in order to remain viable (Hook, 1999). Larger facilities require higher injections of funding, which has increasingly negative impacts on aged care providers who are already suffering inadequate capital funding. If project outcomes are poor, then the consequences to the organization can be far reaching.

The research reported in this paper aimed to examine this potential in the context of AC and the extent to which it has been realised to date. This was done by an interview survey of 11 managers in South East Queensland in late 2004. All those contacted agreed to be interviewed. Of the 11, 8 were from the AC sector, 2 from the hospital sector and 1 from the retail sector to enable coarse comparisons to be made between the sectors represented. The AC organisations represented by the interviewees provide a total of 16,700 residential AC beds, which is 62% of the total number of residential AC beds operated in Queensland.

Data were collected by mixed quantitative-qualitative structured interview survey to ensure an in-depth coverage of all the issues (McCracken 1988). One-on-one personal contact was used to determine each respondent's experiences and views (Brenner 1985). An interview protocol was developed and trialled. This was structured around the main 3 issues of project risk, communications and cost management (see Appendix A).

RESULTS

Risk management

A series of 8 questions were directed at the interviewees in relation to the application of risk management techniques within their organisations as follows:

Q1a: To what extent does your organisation use risk management in its day to day operations?

This question was intended to establish the context of risk management application within the organisation and whether it is applied in a strategic, organisation-wide manner by senior management. Asked to rate this on a scale of 1 (never) to 5 (always), all but two of the interviewees rated this as 5. The responses indicate that there is a high level of awareness and focus on strategic risk management in the AC sector as well as the health and retail sectors. Areas indicated where strategic risk management is applied are:

- Corporate Governance Issues
- Financial Management
- Asset Protection
- Legal Compliance
- IT Management
- Workplace Health and Safety for staff, residents and visitors.

Two AC interviewees commented that whilst risk management was not currently applied consistently across the organisation, a greater focus was being applied by their Boards and it was anticipated to be made a formal requirement in the near future.

The remaining discussion regarding risk management was intended to determine whether this focus on risk management at a strategic level translates into proactive risk management on the development projects.

Q1b: To what extent does your organisation carry out formal risk identification on projects?

Apart from one l scored this highly (4), all the AC interviewees rated this as 1 while all non-AC interviewees scored this as 5. Comments made by AC interviewees in regard to this question were that:

- "Only one of our projects has done this reasonably well"
- "It is done in an ad-hoc manner, if at all"
- "We don't formally identify project risks and document how to manage them"

Q1c: How often does your organisation quantify the potential impacts of identified project risks?

Five AC interviewees rated this as 1 and three as 2, while all the non-AC interviewees again scored it as 5. Feedback obtained from the AC interviewees was that:

- "We don't formally identify risks, so therefore don't quantify them either"

- "It is certainly not done on a formal basis on our projects to my knowledge"
- "We have never done this formally"

Q1d: How often does your organisation formally prescribe specific management measures to minimise identified and quantified project risks?

All of the AC interviewees responded that this was never carried out on their projects, with many indicating this to be a consequence of the responses to the previous questions.

Q1e: How often does your organisation formally prescribe specific management responsibility to minimise identified and quantified project risks?

The AC interviewees again rated this low (1), which was simply reflective of the responses to the previous questions. In addition to referring to the previous responses, the reasons given are:

- "Risk management is not generally understood in a project context"
- "Not convinced of the benefits versus the costs"
- "Too time consuming"
- "Ignorance and lack of awareness"
- "The development industry has always been unpredictable and time and cost overruns are an inevitable part of projects. The 'swings and roundabouts' effect generally levels things out anyway".

- "The industry is so adversarial by nature that it is difficult to get anyone interested in managing risks to *our* benefit as opposed to exploiting them to their own".

Having discussed the existence of project risk management within the interviewees' own organisations, a series of discussion points was initiated concerning the interviewees' perception of construction industry performance in relation to project risk management, and how the AC sector should respond.

Q1f: To what standard do you consider the construction sector in general proactively assesses and manages risk?

All the interviewees rated this low (1) with the exception of one non-AC interviewee (3), who said that the construction industry was proactive because they, as the Client, insisted upon it! It was commented that:

- "Have never seen anything documented"
- "The industry does it on an ad-hoc basis, if done at all (which is hardly ever in my experience"
- "The industry may have a leaning towards risk management but it is driven by us as the Client and industry professionals are reactive – not proactive"
- "It is done poorly in AC, but my experience is that the industry performs much better in hospital projects"
- "The industry is reactive – not proactive. Definitely not a strong enough focus"
- "Generally fairly poorly – but there are some exceptions to this"

Q1g: To what extent should the construction industry undertake risk management as a distinct and formal discipline on construction projects?

Of significant interest in the context of the previous responses, every interviewee immediately rated this as (5) emphatically and without prompting. One interviewee stated that it "Should be a fundamental requirement of project management – regardless of who is doing it"

Q1h: If it were demonstrated that the use of formal measures to identify and manage project risk could increase the probability of a project being delivered more effectively within time and budget, how often would your organisation adopt such measures on future projects?"

All the interviewees again immediately rated this as (5) with one exception who said it would be subject to a positive cost/benefit analysis. Comments included:

- "Senior management would definitely recommend it to the Board"
- The Board would insist upon it"
- Absolutely would insist on it"
- "We already do this anyway – it is a requirement imposed by the Board"

Communications management

The communications initiatives raised concerned:

- *Single point responsibility for the project:* the existence of a single individual with total and identified responsibility for all aspects of the project;
- *Communications plan established at project commencement:* single document that defines project parties and stakeholders, communications protocols and who is responsible for what;
- *Concise, comprehensive consultants briefs:* define precisely the tasks, responsibilities and outcomes that each consultant is required to achieve, thereby adding certainty to the cost of the project;
- *Regular and formal project control group meetings:* that regularly report on and document project status and progress;
- *Regular project status reports:* that formally provide a record of the current status of the project, activities undertaken and issues requiring resolution;
- *Stakeholder ownership of project:* ensuring that all affected stakeholders have ownership of the project;
- *Senior management informed of project progress and status***:** ensuring effective communications with the organisations strategic senior management.

Each interviewee was asked to rate *how important* to them each of these initiatives are on a scale of 1 (not important at all) to 10 (considered crucial) to achieving successful project outcomes. Table 4 summarises the results, which indicate that, with a few minor exceptions, all interviewees consider all the communications initiatives to have a high level of importance.

	ac	ac	ac	ac	ac	ac	ac	ac	Hosp	Hosp	Retail	
Respondent	1	2	3	4	5	6	7	8	9	10	11	Average
Aspect:												
Single Point Responsibility	*9*	*8*	*7*	*8*	*9*	*8*	*8*	*8*	*9*	*9*	*10*	*8.45*
Communications Plan	*9*	*5*	*9*	*8*	*9*	*10*	*10*	*8*	*8*	*8*	*5*	*8.09*
Consultants Briefs	*9*	*10*	*10*	*8*	*8*	*10*	*8*	*9*	*9.5*	*10*	*9*	*9.14*
Formal & structured PCG mtg regime	*9*	*8*	*10*	*8*	*8.5*	*9*	*10*	*8*	*9.5*	*10*	*9*	*9.00*
Regular status reports	*9*	*4*	*10*	*8*	*8*	*7*	*7*	*8*	*9.5*	*10*	*10*	*8.23*
Stakeholder ownership	*9*	*8*	*10*	*8.5*	*9*	*8*	*10*	*8*	*8*	*7*	*5*	*8.23*
Senior management informed	*10*	*3*	*9*	*9*	*8.5*	*7*	*8*	*8*	*8*	*8*	*7*	*7.77*
Totals	**64**	**46**	**65**	**58**	**60**	**59**	**61**	**57**	**62**	**62**	**55**	

Table 4: Level of importance of communications management measures

The next series of questions were designed to determine *how well* the construction industry is delivering the communication initiatives, given the high level of importance placed upon them. Each interviewee was therefore requested to rate how well these are being delivered on a scale of 1 (poorly) to 5 (well).

Aspect 1: Single point responsibility

The AC interviewees' ratings range from (1) to (5) on this aspect. In general, the results suggest that, while for certain organisations this aspect of communications management is being delivered effectively by the construction industry, nevertheless there is some room for improvement. Specific comments from the AC interviewees were that:

- "I want one single individual who is responsible and who I always deal with"
- "The individual responsible for managing the project should be independent of any specific design discipline – they should be at arms length and objective"

Aspect 2: Communications plan established

Five AC interviewees rated this as 1 and three as 2, while all the non-AC interviewees scored it as 5. One interviewee commented that he believed consultants generally regard this as unnecessary because "Consultants know who they need to communicate with – why do they need a document to tell them so?"

One interviewee from the hospital sector commented that a hospital development has a great many stakeholders and effective communications between them simply *must* occur for the project to even progress, let alone be successful, adding that the only way to implement this from the commencement of the project is to prescribe communication protocols in a written document that is distributed to all stakeholders.

Aspect 3: Concise and comprehensive consultant briefs

Again, this aspect was not highly rated by the AC interviewees (3 or below). They indicated that more structure is required in the manner in which consultants are appointed. The effect of this is to improve certainty of cost relating to consultancy fees throughout the project.

Aspect 4: Formal and structured project control group meeting regime

The purpose of the Project Control Group meeting is to provide a forum or mechanism through which the status of the project is formally communicated to the Client. This was

again rated generally average by the AC interviewees in how well the construction industry is delivering that aspect. The one interviewee who rated this as (5) commented that this was substantially due it being imposed on the project design team by the Client. Interestingly, this was the same interviewee who indicated previously that the organisation employs in-house PMs.

Aspect 5: Regular status reports

All the AC interviewees rated this aspect poorly with the exception of the interviewee whose organisation employs in-house PMs to manage their projects, who rated (5). Comments made were that:

- " Written reports are only done by the consultants on an ad-hoc basis"
- "We only get written status reports on our projects if we specifically request them"

Aspect 6: Stakeholder ownership

The AC interviewees rated this more highly than other aspects, and equally with the non-AC interviewees. Several AC interviewees commented that this was because the industry traditionally consists of church/charitable/religious and not-for-profit organisations, and therefore has a greater emphasis on inclusiveness and integration of personnel rather than bottom-line outcomes.

Aspect 7: Extent of senior management informed of project status

The interviewees generally indicated that this was being effectively delivered by the construction industry, although there was a wide range of ratings. A number of AC interviewees indicated that their status as not-for-profit charitable organisations results in a requirement for high quality and transparent reporting to senior management to satisfy ethical and regulatory requirements.

Cost management

During this section of the interviews, the interviewees were presented with a series of questions designed to establish the quantum of projects undertaken during the last ten years and the cost management performance by those responsible for the projects.

Q3a and b: Number of projects during last ten years and average size of project

All AC interviewees' organisations had completed more than five projects in this time. For six AC interviewees, the average size of the projects undertaken was up to $5 million, with one being $6 million and one $10 million and over. For all the non-AC interviewees, the average size of project undertaken was greater than $10 million. This may account to some extent for the differences between the two sectors as formal PM may be perceived as being too expensive for use on smaller projects.

Q3c: How frequently did you receive cost estimates and forecasts during the design period?

Two AC interviewees stated that cost estimates were received regularly during the design period. Four indicated they sometimes received estimate updates and two rated this as never or infrequently.

Q3d: Did you believe that the project was within budget at the time of tender?

The responses to this question were mainly affirmative. One AC interviewee, however, advised that the projects were redesigned to ensure the final contract awarded to a builder was within the available budget.

Q3e: What was the difference in the final contract amount from the initial contract sum?

As is generally accepted, around five per cent variations is considered industry standard (expressed as a percentage of the original contract sum) and provision for this amount is commonly made during the design of the facility in the form of a contingency sum. Several interviewees commented that reasons for cost variations during construction were many and varied and that these should be considered when comparing the responses to this question. Notwithstanding, four AC interviewees indicated variations totalled up to five per cent and three indicated up to ten per cent. All three non-AC interviewees indicated the average cost of variations was up to five per cent (one subsequently commented that this was the case

"except where the project management was poor"). The responses indicated that the AC sector projects have a greater risk of more extensive variations in cost during construction that the non-AC sector.

Extent of use of independent project management

In light of the responses regarding risk, communications and cost management, the interviewees were finally questioned on the extent to which their projects have utilised independent PM as a specific discipline and whether there is a link between this and the performance achieved by the projects in each aspect. In response to this question, Interviewees were asked to respond by scoring from 1 (none), 3 (some) to 5(all).

One AC interviewee stated that all projects utilised independent PM (score 5) (from the organisation that employs in-house PM); two have some of their projects have utilising PM (score 3); and five interviewees have none of their projects utilising independent PM. When five interviewees were questioned on why independent PM had not been utilised, they were generally vague, but notable common replies were:

- "Why is it necessary? – our normal designers do a good enough job"
- "Have not really been aware of the PM discipline and its benefits"

At this point, the interviews were concluded by thanking each interviewee for the time and feedback, and queried was there any other comment they wished to make regarding any of the issues raised. Two interviewees speaking from the AC sector commented that "In my opinion, the quality of the PM is fundamental to the success of the project".

DISCUSSION

Risk management generally

The scores achieved by the AC sector interviewees were generally consistent with each other and indicate that the AC sector employs widespread use of risk management in its overall strategic organisational management. However they were significantly lower than the non-AC sectors in most aspects – suggesting a lack of corollary between the AC sectors professed desire for proactive risk management on its projects and the extent to which it is requiring the construction industry to provide this service. Also, the use of risk management techniques as a distinct and separate activity during the development and construction of AC facilities is virtually non existent.

Communications management

The total scores given by the interviewees were reviewed in relation to the discussion points raised relating to project communications management aspects. As with project risk management, the AC sector scores were consistent with each other, but generally lower than the non-AC sector. This again revealed a lack of association between the requirement for effective communications management in the AC sector and the extent to which these requirements are being delivered by the construction industry.

Cost management

The AC sector has undertaken a high number of projects in recent years and the quality of cost management generally compares favourably with other sectors. However the AC sector may have higher cost variations during construction than the health and retail sectors.

Extent of use of independent project management

The use of independent PM is rare in the AC sector, with only one AC interviewee reporting employing separate PM specialists. The reasons why the AC sector has not extensively and effectively implemented the PM discipline in the development of its facilities was not the specific focus of this research and it is recommended as a subject for further research to determine why this is so. However, feedback and comments made by the interviewees provided anecdotal evidence as follows:

Less onerous corporate governance requirements

Queensland AC has traditionally been something of a cottage industry, with many stand-alone and small organisations providing the care. The Boards of these organisations have often consisted of members of the community who have been in the positions due to their availability – not necessarily their skills. AC providers are now becoming more corporate with onerous governance and reporting requirements required by the Federal Government to

secure funding. There is now much greater scrutiny on how funds are spent, however this has not been the case historically. Therefore the external pressures for more effective management of projects have not in the past been present, resulting in the lack of use of PM.

Ignorance / Lack of Knowledge

This appears to be a strong reason for the lack of use of PM. The Queensland AC sector is traditionally predominantly made up of many not-for-profit organisations, which are not corporate-minded. They have developed long standing relationships with design consultants and the projects have been smaller and much less complex than modern projects. Consequently, there has simply never been the need for PM, and therefore a corresponding build-up of knowledge has not occurred. As a result, the industry has not been aware of what PM entails with the benefits it offers projects, and has therefore never insisted on its use. The design consultants traditionally used by the industry have thus not been exposed to PM and are also not familiar with its benefits. A cycle of ignorance has thus developed between the AC sector and its consultants. This is evidenced by the statements made during the interviews when asked how often PM is used. In general, the responses were vague, but specific comments were that:

- "Have not really been aware of the PM discipline and its benefits".
- "Why is it necessary? Our designers do a good job".

Existing Relationships – Unwilling to Change

The AC sector has generally enjoyed long standing relationships with certain construction professionals. There appears to be unwillingness for those relationships to be challenged, and PM would do this to a degree. This is evidenced by the statement made when questioned why PM has not been used - "Why is it necessary? – our normal designers do a good enough job".

CONCLUSIONS

In surveying the extent to which project risk, communications and cost management occur in the AC sector, it was found that:

- There is a strong need for proactive *Risk Management* during the delivery of its capital facilities. It has not, however, transferred this into the actual management of the projects and has a low use of formal risk management. Furthermore, the industry is largely ignorant of the benefits of implementing formal risk management in a project context. The consultants and construction professionals employed by the AC sector to deliver projects are neither familiar with the application and benefits of risk management nor proactive in its implementation. As a result, the standard of risk management on AC projects is poor. Separate and focussed PM is used rarely by the AC industry. Where it *is* employed however, the frequency and standard of risk management implemented is higher.
- *Communications Management* is considered to be vital in achieving successful project outcomes. There is not, however, a high level of understanding of what successful communications management on projects entails and therefore its implementation is not insisted upon by project teams. Consultants and construction professionals employed by the industry do not possess a high level of understanding of the

measures and tools for successful communications management. As a result, communications management is poorly implemented on AC projects. Where separate and focussed PM is employed, however, the frequency and standard of communications management is higher.

- Projects that are predominantly in the $five million - $ten million range. A large number of projects are carried out however, and therefore effective *Cost Management* is highly important for the industry that suffers increasingly scarce funding. Construction costs are generally well managed but may have higher levels of variations that the health and retail sectors.
- Separate and focussed PM is rarely used on AC projects. In instances where focussed PM *is* used by the AC industry, risk, cost and communications management are more successfully implemented.

Some reasons have been identified why this might be the case. In particular, the small size of AC projects may be perceived to render the use of formal PM uneconomic, the traditionally less onerous corporate governance requirements involved in AC work, the level of ignorance/lack of knowledge of PM and a reluctance to change from traditional procurement processes. Pursuance of the following areas, it is suggested, may help shed some further light on these issues:

- The reasons why construction professionals employed by the AC sector are not becoming familiar with project risk and communications management processes and why they have not been implemented despite the level of importance placed on them by the sector.
- The reasons why independent PM has not been at least trialled by the AC sector given its link to enhanced project success.

- Investigation of the specific role Government could play in achieving higher project success levels.
- Investigation of the organisational and industry constraints to improved methods of project delivery, and how they could be overcome.
- If there are unreasonable constraints, then investigation of the training that could be used to facilitate formal project risk, communications and cost management by TAFE Colleges and Universities, including consideration of a recommended course content/syllabus for each.
- Performance of a case study of two similar groups of AC projects – one using the manner in which the sector has traditionally delivered projects and the other using focussed and separate PM – for comparative analysis of their performance and costs and benefits involved.

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APPENDIX A: INTERVIEW PROTOCOL

1.0 Project Risk Management

Q1a. To what extent does your organization use risk management in its day to day operations?

Never 1	2	Sometimes 3	4	Always 5

Comments:

Q1b. To what extent does your organization carry out formal risk identification on projects?

Never 1	2	Sometimes 3	4	Always 5

Comments

Q1c. How often does your organization quantify the potential impacts of identified project risks?

Never 1	2	Sometimes 3	4	Always 5

Comments

Q1d. How often does your organization formally prescribe specific management measures to minimize identified and quantified project risks?

Never 1	2	Sometimes 3	4	Always 5

Comments

Q1e. How often does your organization formally prescribe specific management responsibility to minimize identified and quantified project risks?

Never 1	2	Sometimes 3	4	Always 5

Comments

Q1f. To what standard do you consider that the construction sector in general proactively assesses and manages risk?

Poorly 1	2	Average 3	4	Well 5

Comments

Q1g. To what extent do you consider that the construction industry should undertake risk management as a distinct and formal discipline on construction projects?

Never 1	2	Sometimes 3	4	Always 5

Comments

Q1h. If it were demonstrated that the use of formal measures to identify and manage project risk could increase the probability of a project being delivered more effectively within time and budget, how often would your organization adopt such measures on future projects?

Never 1	2	Sometimes 3	4	Always 5

Comments

1.0 Project Communications Management

When undertaking a capital works development or project, how important would the following be to you and have they been adequately addressed?
Rate from 1-10, being 1 (not important at all) or 10 (considered crucial).

Aspect	Importance (Rate 1-10)	How Well?				
		Poorly 1	2	Average 3	4	Well 5
Single Point Responsibility						
Communications Plan established at commencement of project						
Concise, comprehensive consultants briefs						
Regular and formal structured PCG meeting regime – status, etc						
Regular and formal project status reports						
Stakeholder ownership of project / identification with project team						
Senior management informed of project progress and status						

2.0 Project Cost Management

Q3a. Number of projects in last 10 years?

(a) 0 - 3 ☐

(b) 3 - 5 ☐

(c) 5+ ☐

Q3b. Average size of project?

(a) $0m - $5m ☐

(b) $5m - $10m ☐

(c) $10m+ ☐

Q3c. How frequently did you receive cost estimates and forecasts during the design period?

Never/Infrequently 1	2	Sometimes 3	4	Regularly 5

Comments

Q3d. Did you believe the project was within budget at the time of tender?

(a) Yes ☐

(b) No ☐

(c) Didn't know ☐

Q3e. What was the difference in the final contract amount from the initial contract sum?

(a) 0% - 5% ☐

(b) 5% - 10% ☐

(c) 10%+ ☐

Q3f. Did these projects utilize independent project management?

None 1	2	Some 3	4	All 5

Comments

3.0 Conclusion

Is there anything else you would like to add/raise that I have not addressed in relation to these aspects of project Management?

Thank you for your time and participation in this interview.